


Florida Elevate Science 2019 Middle Grades Program Overview

Home



Hover over a topic to hear more about it.
Click a topic to learn more.
When you are finished with all topics,
click the **Finish** button.

Reward Don't forget to unlock your reward when you're done!

Finish

If you're anything like me, getting a new science curriculum can feel exciting but also a little overwhelming!

In this tutorial, we'll fly through the basics of teaching with Elevate Science Florida Edition 2019 and how it can equip you to support a culture of scientific inquiry in your classroom.

Scared of heights? We've got you covered.

Choose any of the topics in the classroom to get started! You'll get a chance to return here and visit as many topics as you like.

Program Materials



You've received a package of books and materials along with a digital subscription to Savvas Realize. Depending on your district, you may have received equipment materials kits.

You may be using the integrated program, where you will be teaching a mixture of life, earth, and physical science at each grade level.

Or you may be using the program that covers one domain in each grade level. Or maybe your school has selected a custom sequence of topics for each grade level. Either way, the major components and program structure are the same.

Let's look at both the print and digital versions of the program components to see how they will help you plan and teach your science lessons.

Your print **Teacher Edition** mirrors the Student Edition but also contains additional front and end matter and embedded supports on each page.

The **Student Edition** contains reading selections, activities, lab sheets, assessments, and more.

Students can complete these activities in the print version or the Realize Reader Student eText. Many readers will love the option to hear the text read aloud. Students can also download some activities as a Word doc, and starting in Grade 2, students can answer questions in a digital notebook that you can view and grade! Here's a link to the tutorial that will show you how to do that.

Students can also complete interactive versions of activities on Savvas Realize, such as virtual labs and interactivities.

In addition to the primary texts, you've got print and digital versions of the ***Engineering Design Notebook***, where students can brainstorm, design, prototype, build, and refine their inventions.

Use the ***Science and Engineering Practices Handbook*** for information and activities around the science and engineering practices, an important part of your standards.

You may have also received **materials kits** that you can use during hands-on activities and labs. Didn't receive any materials kits? Fortunately, most of the materials are common items that you can gather. A list of these items is found at the beginning of each topic in the Teacher's Edition. Or use the virtual labs instead!

Teacher's Edition

LESSON 1
Matter and Energy in Earth's System

CONNECT

Objectives
Students will analyze and interpret data to describe evidence that

- Earth has four major subsystems, or spheres, that cycle matter and energy and shape Earth's surface: atmosphere, geosphere, hydrosphere, and the biosphere.

Students will construct explanations using reasoning to predict similar patterns by recognizing that the Earth system

- involves flows of matter and energy through different components.
- has two main sources of energy: heat from the sun and heat from Earth's interior.

Students will develop and use models to demonstrate how

- a system returns information about itself, and that information results in change.

Focus on Mastery!

Cause and Effect As students examine the evidence of change in the lake, have them...

- describe what they already know about the characteristics of a lake environment.
- examine different components of the habitat, noting the unusual appearance of the rocks.

SC.6.E.2 Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate those landforms as they apply to Florida.

SC.6.E.7.A Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere.

SC.6.E.8.4 Identify the role of models in the context of the sixth-grade science standards.

4 Introducing Earth's Systems

LESSON 1
Matter and Energy in Earth's System

Guiding Questions

- What are the different components of the Earth system?
- What are the sources of energy for the processes that affect Earth?
- How can you model the cycling of matter in the Earth system?

Vocabulary
atmosphere
geosphere
hydrosphere
biosphere
energy

Academic Vocabulary
system
feedback

VOCABULARY APP
Practice vocabulary on a mobile device.

Connections

Literacy Cite Textual Evidence

Math Interpret a Line Graph

Quest CONNECTION
Think about how an event, such as a fire, in one sphere can have an impact on another sphere.

Connect it!

Draw a line on the photo to indicate where the surface of the lake was in the past.

Cause and Effect What happened to the water in this lake? Why do you think this happened?
The water has receded. The water is drying up because the area is experiencing a drought.

PROFESSIONAL DEVELOPMENT

Content Refresher

Lesson 1 emphasizes the different components of the Earth system and the sources of energy for the processes that affect Earth. The Earth system involves flows of matter and energy through different components. At each step of a cycle of matter, some change in energy occurs to keep the cycle going. The Earth system has two main sources of energy: heat from the sun and heat from Earth's interior. These energy sources drive cycles in the four "spheres," or subsystems, of Earth: atmosphere, geosphere, hydrosphere, and the biosphere.

Teacher's Edition

Click this button to close

- Mirrors Student Edition
- Contains additional front and end matter and embedded supports

School to Home Letter

Dear Family Member,

As your child's science teacher, I am looking forward to helping your child learn about science. Because I know that you want your child to be successful, I offer these suggestions so that you can help your child gain proficiency in science.

- Your child's textbook is very different from most—it's meant for students to write in it. Therefore, it is a record of learning. Look through lessons your child has completed recently, and be sure to ask lots of questions. One of the best ways for students to check on their learning is to explain it to someone else.
- Ask your child about homework assignments and check that he or she has completed them.
- Help your child collect materials and information for school activities.
- Encourage computer literacy. Advise your child to use computers in school or at the library. If you have a home computer, help your child do research online.

Throughout this program, your child will be introduced to Earth's major systems and how they interact: how energy in Earth's atmosphere affects the ocean and atmosphere; water in the atmosphere and how it creates patterns of weather and climate; and the processes of weathering, erosion, and deposition. Students will also learn about Earth's interior and the rock cycle; plate tectonics and how that relates to the formation of Earth's structures; Earth's geologic history and time scale and the impact of humans on the environment. Finally, students will be introduced to the Earth-Sun-Moon system and the interactions of those bodies, as well as the solar system and the universe.

I encourage you to stay involved in your child's learning. By all means, visit the classroom during open house or make an appointment with me if you have questions.

Science Teacher

Your print **Teacher's Edition** mirrors the Student Edition but also contains additional front and end matter and embedded supports on each page.

Student Edition

The screenshot shows the 'Water Cycle' investigation interface. On the left, a text box asks: 'Part 2 (cont'd) Which of these five water cycle processes are directly caused by energy from the Sun? Indicate your answer by selecting the buttons located near the labels.' Below the text are 'Next' and 'Check Answer' buttons. The central diagram illustrates the water cycle with labels: 'Evaporation' (checked), 'Surface runoff', 'Seepage', and 'Melting snow' (checked). A 'Condensation' label is also present but not checked. A purple callout box on the right side of the diagram contains the text 'Virtual labs' and 'Interactivities'. At the top right, a green arrow points to a close button with the text 'Click this button to close'.

The **Student Edition** contains reading selections, activities, lab sheets, assessments, and more.

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Engineering Design Notebook

FLORIDA Physical

Engineering Design
Notebook

Allows student to

- Solve engineering challenges by using the design process
- Collaborate, provide feedback, and think creatively
- Create prototypes, optimize design solutions and communicate effective solutions

elevate.science

Click this button to close

- Brainstorm
- Design
- Prototype
- Build
- Refine

DESIGN CHALLENGE

Can you put decomposers to work and build your own composter? Go to the Engineering Design Notebook to find out!

In addition to the primary texts, you've got print and digital versions of the **Engineering Design Notebook**, where students can brainstorm, design, prototype, build, and refine their inventions.

Science and Engineering Practices Handbook



Use the **Science and Engineering Practices Handbook** for information and activities around the science and engineering practices, an important part of your standards.

Materials Kits

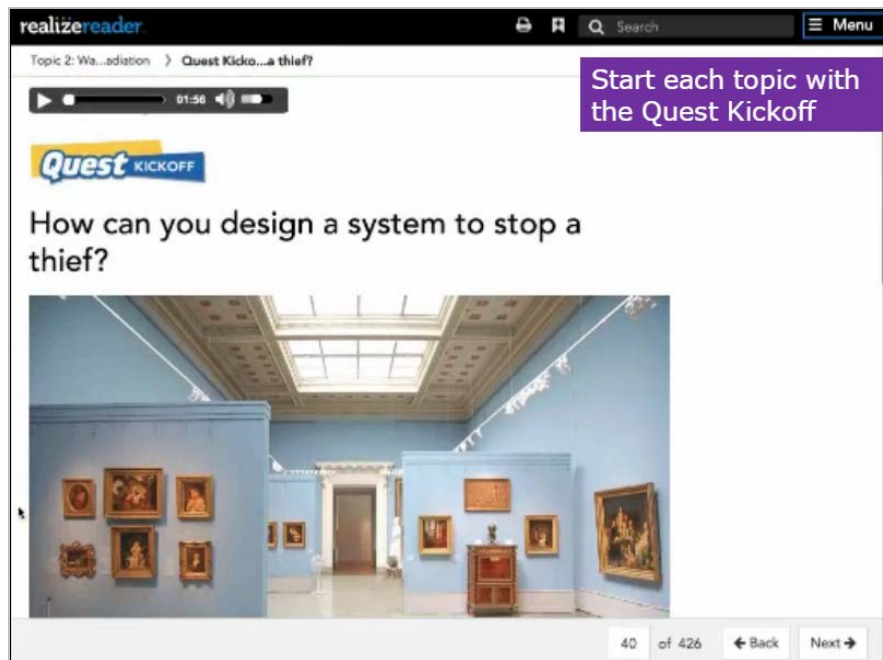
Click this button to close

- Classroom Materials
- Labware Safety
- littleBits® STEM Invention
- Maker Crates

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Typical Class Period



Whoa, back up there! Before we look at the lesson detail, let's zoom out a little. First and foremost, make sure you've set up each topic by introducing the phenomena, and kick off the Quest kickoff—an engaging NBC Learn® is a registered trademark of littleBits Electronics Inc. video.

The Quest presents a problem for students to solve using the science content and practices in that topic. They'll complete Quest Check-in activities during lessons as they develop, investigate, and synthesize their ideas, and then they'll present their findings at the end of the topic.

Now, you asked about a lesson, so let's dig in!

Just remember: Connect, Investigate, Synthesize, Demonstrate-or CISD. These four things describe what students will be doing in each lesson phase. And they link nicely to the 5E inquiry process you may be familiar with already—Engage, Explore, Explain, Elaborate, and Evaluate.

Connect activities build and leverage background knowledge that can help students engage with the phenomena and make sense of the lesson's context.

Investigate activities are my favorite. This is where you'll find labs and videos where students explore the scientific phenomena.

Next, they synthesize what they've experienced through activities like interactivities, Quest Check-ins, and classroom discussions to test out their ideas on a problem situation to see what works and why.

Finally, they'll demonstrate what they've learned through a Quiz that can be assigned from Savvas Realize.

Don't forget the Topic Close, where students will show what they've learned in their Quest Findings and a uDemonstrate Lab!

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Differentiation and Assessment

SCAFFOLDED QUESTIONS

Use the questions below to assess students' depth of understanding of the content on this page. Have students support their responses with evidence from the text.

Compare How does secondary succession differ from primary succession? (*Secondary succession occurs in an area where an ecosystem has been disturbed, but soil and some organisms still remain. Primary succession occurs where there is no soil and there are no organisms present.*)

DOK 2

Distinguish What kind of succession occurs in an area that has been damaged by fire? (*Secondary succession would be more likely that soil and some organisms still remain.*)

DIFFERENTIATED INSTRUCTION

L1 Support Struggling Students
Ask students to suppose that they are reporters who want to find out about field biologists and what they do. Have students pose questions to you as a reporter. Then switch roles and ask questions to the students.

L3 Support Advanced Students
Organize students in pairs. One student will be a field biologist who will give a mock interview to the field biologist, asking specific questions about the environment and the field biologist, any tools they use, and interactions observed between living and nonliving things.

ELD SUPPORT

ELD.K.12.ELL.SI.1, ELD.K.12.ELL.SC.1

Writing Use these prompts for students at different proficiency levels to help them write about the main ideas on the page.

Entering Draw a picture of two organisms that need each other to survive.

Beginning Write and complete the following sentence: In some relationships, two species _____ on one another. (*depend*)

Developing Look at the photo of the banded mongoose and the warthog. Describe their relationship.

Expanding Tell what kind of relationship is shown in the photo of the hummingbird and the flower. Give evidence to support your answer.

Bridging Write a paragraph that compares and contrasts mutualism and commensalism.

Elevate Science educators believe that *all students* can engage in meaningful scientific inquiry! So let's find out how, using your differentiation resources.

Look for these sections in your Teacher Edition for tips on differentiating to all students-struggling students, English language learners, and advanced learners.


If some of your students struggle with reading, they can use the audio support features in the Realize Reader eText to have the text read aloud to them.

You'll find assessments at the end of each lesson, at the end of each topic, and in the Program Resources folder on Savvas Realize. Let's look at a few of my favorites.

Elevate Science includes more traditional forms of assessment that show what students *know*, but you'll love the Evidence-Based Assessments and Performance Assessments at the end of each topic that show you what students *know how to do*, including designing and running their own lab experiments! And don't forget the Quest Findings, where students present their findings based on the ideas they have been developing and refining over the course of the topic.

Student data is a valuable teaching tool, but we all know how quickly it can get out of hand! If you're wondering how to collect assessment data without adding stacks of paper to your desk, consider de-cluttering with digital assessment and auto-grading! If this is something that interests you, find out more in these tutorials!

Digital Materials



Videos and interactivities are offered on Pearson Realize™

You may be wondering how useful the digital program will be if computers are in short supply for your students. But guess what? Even with a single computer, you can blend in the digital resources by projecting content. And you don't want to miss the incredible videos and interactivities that Savvas Realize has to offer!

Let's take a quick interactive tour of the Savvas Realize platform, where your digital course is housed.

Once you've logged in, you'll notice that the Savvas Realize home page is divided into three sections- Programs, Classes, and Data. Hover over each section to learn more.

Use the activities on Savvas Realize to project for the class or assign individually for students to complete on their own.

Still feeling a little shaky about navigating and using the Savvas Realize platform? There are many additional tutorials you can find on [MySavvasTraining.com](https://www.mysavvas.com/training).

State Science Assessment

The screenshot displays the Savvas Realize interface for the Pearson Elevate Science Florida Edition Earth Science course. At the top, there are navigation tabs for 'PROGRAMS', 'CLASSES', and 'DATA'. Below these, the course title 'Pearson Elevate Science Florida Edition Earth Science' is shown, along with sub-navigation options: 'Table of contents', 'Resources', 'Standards', 'eText', and 'Tools'. A secondary navigation bar includes an 'Assessment Download Center' button, 'Thumbnail view', and 'List view' options. The main content area is titled 'Table of Contents' and lists five topics, each with a representative image: 'Navigating Your Digital Course' (with 'Assign' and 'Customize' icons), 'Topic 1: Introduction to Earth's Systems', 'Topic 2: Energy in the Atmosphere and Ocean', 'Topic 3: Weather and Climate' (with a purple callout box for 'Custom test questions for Florida'), and 'Topic 4: Earth's Surface Systems'. Additional interface elements include 'Rearrange', 'My content', and 'Create content' options.

I bet you're wondering how this program will prepare your students to conquer that dreaded eighth-grade assessment!

Behind door number one, we have the *Florida Science Assessment Workbook*, with key vocabulary and five practice tests-in both print and a downloadable digital file on Savvas Realize. You can find it in the Course Tests folder. Oh, and eighth-grade teachers-take comfort in the fact that sixth- and seventh-grade teachers also get access to test prep books. This is a team effort, after all!

And behind door number two, I present Note-Taking Strategies, Reading Strategies, and Test-Taking Strategies in the Program Resources folder-all assignable to students. Visit these throughout the year to build habits of mind for independent learning and testing.

Finally, you've got a digital test bank called ExamView®, with questions specifically designed for Florida that you can use to create custom tests. Download it here to get started!

With all of these resources, we're hoping to help you avoid the mad rush before testing season by spreading test prep over three years.

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